

Response to Restriction Requirement and  
Preliminary Amendment  
Serial No.: 10/776,599  
SUGHRUE MION, PLLC Ref: Q79847

### **AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

#### **LISTING OF CLAIMS:**

Claim 1 (original): A crimp state estimation apparatus for estimating a crimp state of a crimp contact terminal when the crimp contact terminal comprising a bottom wall for positioning a core wire of an electric wire and a pair of crimp pieces upright from opposite margins of the bottom wall and the core wire are held between an anvil and a crimper and are crimped, the crimp state estimation apparatus comprising:

an information input section for inputting information on the crimp contact terminal, the electric wire, the anvil, and the crimper and an input compression ratio of the core wire; and

an estimation unit for calculating a total length of the bottom wall and the pair of crimp pieces after crimp in a cross section orthogonal to the core wire based on the information and the input compression ratio and estimating a cross-sectional shape of the bottom wall and the pair of crimp pieces after crimp based on the total length.

Claim 2 (original): The crimp state estimation apparatus according to claim 1 further comprising:

a calculation unit for calculating a calculated compression ratio of the core wire based on the information; and

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a crimp height calculation unit for finding spacing between the anvil and the crimper applied when a difference between the input compression ratio and the calculated compression ratio falls below a predetermined value.

Claim 3 (original): The crimp state estimation apparatus according to claim 2, wherein the calculation unit calculates a total cross-sectional area of the core wire, the bottom wall, and the pair of crimp pieces after crimp;  
calculates a cross-sectional area of the crimp contact terminal after crimp;  
calculates a cross-sectional area of the core wire after crimp based on the total cross-sectional area and the cross-sectional area of the crimp contact terminal; and  
calculates the calculated compression ratio of the core wire based on the cross-sectional area of the core wire and a cross-sectional area of the core wire before crimp input to the information input section.

Claims 4-6: Cancelled.